

Effectiveness of Canada's Employment Equity Legislation for Women (1997-2004): Implications for Policy Makers

L'efficacité de la loi canadienne en matière d'équité en emploi chez les femmes (1997-2004) : leçons pour les décideurs politiques

Eficacia de la legislación canadiense sobre la equidad del empleo para las mujeres (1997-2004): Implicaciones para los decisores políticos

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Résumé de l'article

Cette étude questionne l'efficacité de la Loi canadienne en matière d'équité en emploi (LCEE) dans le cas des femmes en emploi. Elle fait appel à des données quantitatives provenant de deux sources : les rapports que doivent soumettre les employeurs en vertu des dispositions de la LCEE et le recensement du Canada mené par Statistique Canada, et couvre la période 1997 à 2004.

Comme les femmes constituent le plus important des quatre groupes désignés dans la LCEE, l'efficacité de la LCEE pourrait avoir des conséquences pour une proportion significative de la main-d'œuvre canadienne. Le résultat le plus significatif de l'étude est à l'effet que l'équité en emploi pour les femmes s'est effectivement améliorée durant la période sous étude mais à un rythme décroissant. En fait on pourrait même assister à un renversement de l'équité en matière d'emploi pour les femmes dans les industries couvertes par la LCEE.

Il ressort clairement de notre analyse que les femmes en emploi dans les entreprises couvertes par la LCEE continuent d'être sous-représentées, particulièrement dans les grandes entreprises. L'application et la mise en oeuvre de l'équité en emploi doit être assumée par la Commission canadienne des droits de la personne (CCDP) puisqu'il ne peut être pris pour acquis que les plus grandes entreprises s'en tirent bien dans l'ensemble en matière d'équité en emploi. Nos résultats et analyses suggèrent en fait que les entreprises de moindre taille affichent une plus grande équité en emploi que celles de plus grande taille. La CCDP serait également avisée de se pencher sur les groupes professionnels au sein des grandes entreprises pour lesquels l'équité en emploi reste faible ou non existante selon les données du recensement.

Le comportement sous-jacent à la discrimination sexuelle s'est modifié au fil des ans mais de manière limitée. Par exemple, les chances d'emplois pour les femmes continuent d'être problématiques (dans les cas des gestionnaires seniors, des ouvriers qualifiés et des employés de métier) et nécessiteront des efforts continus et intensifiés pour une amélioration satisfaisante. Il y a aussi de grandes disparités en matière d'équité en emploi entre les emplois primaires (permanents, à temps plein) et secondaires (temporaires, à temps partiel), celle-ci étant beaucoup plus faible dans le secteur secondaire. Ressources humaines et développement des compétences Canada (RHDCC) se doit d'avoir des politiques actives du marché du travail pour corriger ces déséquilibres.

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Effectiveness of Canada's Employment Equity Legislation for Women (1997-2004): Implications for Policy Makers

Harish C. Jain, John J. Lawler, Bing Bai and Eun Kyung Lee

This study focuses on the effectiveness of the federal Employment Equity Act (EEA). We assess the EEA with regard to female employees using quantitative data from employer reports published under the provisions of the EEA and the Canadian Census. Data in this study cover the period 1997 to 2004. The most significant finding is that employment equity has increased over time, but at a diminishing rate. If fact, there now may be something of a downturn in employment equity for women in the industries covered by the EEA. Several policy implications following from the study are provided.

KEYWORDS: employment equity, affirmative action, employment discrimination, human rights, women

Canada has extensive legislative and constitutional protections against employment discrimination based on gender, race, ethnicity and other grounds (Jain, 2006). The Employment Equity Act (EEA) was passed in 1986, then amended in 1995 (Jain, Sloane and Horwitz, 2003). Provisions of the EEA require positive efforts on the part of employers to reduce disparities in employment and workforce representation between designated groups and the general workforce *regardless of its causes*. Employment equity (EE) is pro-active while human rights laws related to discrimination are reactive. In most cases, human rights laws require complainants to file a charge with the respective Human Rights Commission or Tribunal, while the EEA requires covered employers to be pro-active in reducing and eliminating employment discrimination. Under the EEA, the federal government has regulatory jurisdiction over only a limited set of industries: banking, communications, and transportation. Firms in those industries, as well as the federal government departments and (most of the federal) agencies, are subject to the requirements of the EEA. Our study is to be confined only to private companies covered by the EEA.

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This study applies institutional theory, specifically what has been termed the “new institutionalism” (DiMaggio and Powell, 1991), to the analysis of the efficacy of the EEA. One aspect of the law relates to employment levels, another to wages. Our focus is only on the former. Of special concern is the period after 1996. As of 1997, the Canadian Human Rights Commission (CHRC) had authority to audit companies covered by the EEA and to request sanctions for those who fail to meet their EE obligations. Our study is concerned with the responses of EEA-covered companies to the amended law. We would anticipate that adjustment to the law would occur over time, as companies became used to the new provisions of the EEA and as organizations observed and adopted one another’s policies. Thus, we analyze progress toward employment equity goals for women over time and whether any change has been increasing, decreasing, or constant. We also examine the extent to which women who are visible minorities, aboriginals, or disabled are making progress relative to women who are not in any of those categories and the extent to which any such changes have been time-dependent. Finally, there are various contextual and organizational influences (industry, province, occupation, employment status) that can be seen as potential institutional influences on employment equity (EE) outcomes for women. These factors are also examined.

Employment Equity Act

Our focus in this study is the EEA employment equity program. Under the EEA significant data have been collected on companies covered by the act over almost two decades. However, for the private sector, the EEA is limited to companies in three principal industrial sectors—banking, transportation, and communications—and a fourth miscellaneous category. For those firms covered by the EEA, there are various requirements to establish and pursue employment and pay goals for underrepresented and underpaid target groups across fourteen broad occupational categories. Firms with 100 or more employees are required to file annual reports indicating the employment status of designated groups (women, aboriginal persons, persons with disability, and visible minorities) in their organizations. The government issues annual reports assessing the status of the law and the effectiveness of employment equity programs of each firm in its jurisdiction (including total employment, hiring, promotions, discharge, and salaries). These reports are widely disseminated and are available on the Human Resources and Social Development (HRSDC) Website. Companies can be and are audited by the Canadian Human Rights Commission (CHRC) officers, and those that fail to achieve progress on employment equity goals can eventually be taken to the Canadian Human Rights Employment Equity Tribunal and subsequently to courts, where sanctions can be issued.

Previous Research on Women

An examination of salaries, occupations, career patterns, unemployment, and labour force participation rates indicates serious disparities between the labour force experiences of women. Women are playing an increasingly important role in the workplace.

They are still generally paid less than men and still remain under-represented in certain sectors and occupations (Agocs, 2002; Chaykowski and Powell, 1999; Edwards *et al.*, 1999). In addition, courts continue to find evidence of sex discrimination in private as well as federal government departments alike; a recent case was that of *Lucy Farias v. David Chuang c.o.b. Queenstate Dental Care* (2005), where the Tribunal found Dr. Chuang guilty of sexual solicitation and harassment against Ms. Farias and subsequently awarded her \$32,000 for general damages and mental anguish and \$4,354 for 14 weeks' wages.

Another case is that of *Tawney Meiron* (1999). She was a forest fire-fighter employed by the government of British Columbia. She lost her job when she failed to pass a component of a new fitness test (having to run 2.5 km within 11 minutes). Prior to the new test, she had been successfully employed in her present job for three years. The British Columbia Government Employees Union (BCGEU) grieved the firing to an arbitrator. The arbitrator ruled that Ms. Merion had established a *prima facie* case of adverse effect discrimination (that is, the test had disproportionate impact on women). The Supreme Court ruled that the BC government did not show that Ms. Meiron's failure to meet the standard presented a safety risk. The government, therefore, according to the Court, had not accommodated her to the point of undue hardship.

Labour Force Participation

The increased participation of women in the paid work force has been regarded as one of the most significant social trends in Canada in the past quarter century. In 2004, 58% of all women aged 15 and over were part of the paid work force, up from 52% in 1987. In contrast, the proportion of men who were employed fell during this period from 70% to 68%. Approximately 40% of working women, in comparison with less than 30% of men, are in part-time, contract, or other non-standard work arrangements. As of October 2007, 21.2% of Canadian women worked part-time compared to 6.4% of men. Women are almost twice as likely as men to be part-time temporary workers in comparison with men (Cranford, Vosko and Zukewich, 2003). The participation rates of women have experienced an upward trend since the passage of the Employment Equity Act in 1986 and several reasons have been advanced to explain this increase in participation rates. These include lower birth rates, greater use of day care services, higher education levels for women, and the types of jobs created in recent years (Statistics Canada, 2005).

Occupational Segregation of Women

Occupational sex segregation has consistently been identified as a major manifestation of discrimination and is still a significant feature of the Canadian labour market (Chaykowski and Powell, 1999). Analyzing the impact of EEA on occupational segregation of women in traditionally female-dominated jobs (such as nursing, teaching,

clerical or administrative, and sales and service occupations) from the year it came into effect in 1987 and recently in 2004, there was a decrease of only 4%, from 72% in 1987 to 67% in 1996 and 2004. It suggests no change in the proportion of women employed in these traditionally female-dominated occupations over the past decade (Lindsay and Almey, 2006).

In recent years, the competing demands of work and family have given rise to various forms of non-standard work arrangements, such as temporary help agency work, on-call work, day labour, contract work, independent contracting, self-employment, and part-time work in a standard employment relationship. Non-standard work is not growing because of competing demands of work and family so much as it is a consequence of restructuring of the economy and labour market so that contingent work makes up a growing percentage of all jobs; also it decreases employers' costs. Some women choose part-time work for family reasons, but many are in part-time work involuntarily (Vosko, 2000, 2006).

Research and statistics have shown that women are much more likely than men to be employed in non-standard jobs (Townson, 2003; Lindsay and Almey, 2006) and are more likely to work weekend jobs (Zeytinoglu and Cooke, 2006; Zeytinoglu *et al.*, 2004). In 2004, 27% of the total female work force consisted of part-time employees, compared with just 11% of employed men. Several reasons have been cited to explain why women chose to work part-time: 27% of women in 2004 reported that they did not want full-time employment, while 25% indicated they were going to school, 14% said they did so because they were caring for children, and 4% did so because of other personal or family responsibilities.

The issue of double jeopardy is of paramount concern and seems to further aggravate problems for women. The proportion of workers who are women and a member of one of the other designated groups (so called double jeopardy) went from 4.3% of all workers in 1987 to 8.1% of all workers in 2001. They represented 43.3% of all workers employed with 520 of employers covered under the EE legislation in 2006 (HRSDC, 2007: 12, 6). England (2003) analyzed the numerical representation of women and disabilities status in the "Big Six" banks and found that women with disabilities accounted for 1.3% of the labour force employed by the banks in 1981, which increased minutely to 1.4% in 2001. A principal reason for concern over occupational segregation is that it is generally seen as an important reason for the continuing differences between the average wages of men and women (Anker, 1998).

A sizeable amount of research to date has focused on assessing the success of the EEA to reduce systemic discrimination against the four designated groups. A comprehensive review of the literature suggests that while the policies appear to have had some positive effects for some members of the target groups, gaps still remain in employment opportunities for these groups (Agocs, 2002; Antecol and Kuhn, 1999; England and Gad, 2002; Busby, 2006; Falkenberg and Boland, 1997; Mason, 1997; Jain, Sloane and Horwitz, 2003; Jain and Lawler, 2004).

The question of qualification and competence of women hired under Affirmative Action has been consistently raised in US and has sparked research interest in the last 20 years. Holzer and Neumark (1999) investigated whether minority or female employees hired under Affirmative Action were less qualified relative to other groups of workers. Utilizing micro-level data, authors found evidence that non-white women and minority employees hired under Affirmative Action had lower educational attainment and were somewhat more likely to fall short of formal educational requirements. However, when they considered measures of outcomes for workers in these jobs, they found that minorities and females hired under Affirmative Action had relatively higher wages and probabilities of promotion than in organizations not using Affirmative Action while hiring.

They also examined the question of qualification and relative productivity. Overall, the authors do not find any proof that women and racial minorities hired in businesses covered by affirmative action have a performance level lower than white males and this, even though the average level of education of black employees is lower. While discrimination against women appears to have declined, the research evidence indicates that Canadian women continue to face significant labour market problems (Vosko, 2000, 2006; Cranford, Vosko and Zukewich, 2003).

Theoretical Framework and Hypotheses

We base our analysis on arguments that derive from institutional theory (DiMaggio and Powell, 1991; Meyer and Rowan, 1991), what has come to be known as the “new institutionalism.” The neoinstitutional framework focuses on the role that external social forces play in shaping organizational actions. A prime assumption of neoinstitutional theory is that organizations seek legitimacy from the external world. Scott (1998) identifies the three primary mechanisms that might impact firm actions: *regulative* (i.e., legal) forces, *normative* forces (which are connected to the professional norms of managers), and *mimetic* forces (involving inter-organizational imitation). The impact of these forces is that certain ways of doing things become institutionalized, or “taken for granted” across populations of organizations. Institutional theory has been used in a wide range of studies of organizational action (Jaffee, 2001) and can lead to an understanding of the propensity of firms to discriminate in employment decisions (e.g., Blum, Fields and Goodman, 1994).

Our prime objective is to assess the effectiveness of the EEA in improving employment equity outcomes for women in Canada once it was armed with an enforcement mechanism. Although audits and other legal actions under the EEA may be rare, the potential for these consequences altered the landscape. Institutional theory would suggest that companies respond to regulatory forces, such as the provisions of the EEA. Enhancement of the enforcement mechanism might be expected to lead to increased compliance. Of course, organizations confront a wide range of institutional forces, and compliance with all of these societal expectations is likely to prove unworkable.

Oliver (1991), for example, argues that there may be a continuum of organizational responses to institutional pressures, ranging from acquiescence to avoidance, defiance, or manipulation. She posits that the nature of a focal organization's response depends on factors such as organizational uncertainty and the degree of legal coercion. In the case of the EEA, the newer enforcement mechanisms would be viewed as increasing the costs of non-compliance, yet these costs might not be sufficient to generate greater compliance with EE goals. Consequently, enforcement mechanisms might be viewed as weak by employers, thus lessening motivation to comply with the law. Oliver (1991) posits that compliance to institutional pressures is also affected by the degree of environmental uncertainty. The requirement that firms submit annual reports that are publicly available (posted on the Internet) would presumably reduce the option of a firm hiding behind a veil of uncertainty. However, the online documentation is somewhat complex and perhaps all but the largest firms might evade public scrutiny. Oliver (1991) argues that it is under conditions of high uncertainty that firms are more apt to imitate one another. So any ambiguity regarding EEA compliance might allow firms to follow long-established societal norms promoting discrimination. One approach to testing the hypothesis that EEA amendments increased employment equity in the case of women would be to contrast the actions of firms covered by the EEA with those that were not. Research in the US on affirmative action (Leonard, 1984) has demonstrated that such programs were effective. In Canada, the EEA applies to all companies within the covered sectors and requires each of these companies to pursue positive measures to reduce, if not eliminate, employment inequities affecting women and members of other designated groups. Thus it is not possible to compare similar companies with or without EE programs.

Given the aforementioned limitations, we can still assess EEA efficacy. The time trend in EE goal attainment subsequent to implementation of the new rules would be one way of doing this. Progress with respect to EEA goals anticipates comparisons within occupations and provinces as to the representativeness of designated groups within covered companies relative to census data, which provide information on employment by designated groups across fourteen occupational groups in each province. Thus, it is possible to make very micro-level assessments of the achievement of EE goals (i.e., relative employment of women versus men for a given company in a particular occupational group and in a particular province). If there is a learning process on the part of managers with respect to EEA goal attainment and the strategies that can be used to be successful in pursuing such objectives, then we should see increasing proportions of women employed within a particular group of workers to the extent that employers are responsive to the EEA. An important aspect of the learning process would be imitating other companies as well (i.e., institutional mimetic processes) with respect to hiring practices for women. If the trend term were not to be both positive and statistically significant, it would indicate little in the way of learning or adapting to the revised EEA by employers. We would expect:

HYPOTHESIS 1: There will be a positive time trend in female employment equity in the period following the most recent amendments to the EEA.

There is also the possibility of nonlinearities here: the degree of the employer response to the changes in the law may have been enhanced or degraded over time. One possibility would be that firms would have initially endeavoured to be compliant with the EEA, later learning strategies for avoiding or reducing compliance. Under those circumstances, the time trend would be positive, though the slope might decrease over time. If so, a quadratic (i.e., squared) time term in the equation would be significant and negative in sign. On the other hand, the learning process might be positive. Firms may learn to adapt to the EEA requirements, and longer-term learning increases EE goal achievement. Imitation of other firms also working to be more compliant with the law could reinforce this effect. Under those circumstances, the slope of time trend would increase and the quadratic term would be positive in sign. Which, if either, of these effects predominates is an empirical question that is explored below. Another aspect of our post-hoc analysis, also discussed below, was a further analysis of differences in employment equity between women who are visible minorities, aboriginals, or disabled versus women not in any of those categories (i.e., Caucasian, non-disabled women).

An important aspect of neoinstitutional theory is that such processes are rooted in environmental imperatives, such as the employment policies and practices of other organizations in similar circumstances. However, any given institutional force is not likely to be fully determinative with respect to employment practices, as companies exist in multiple organizational fields. Here we have examined three important environments: occupational, geographic, and industrial. The impact of the occupational environment can be pervasive across populations of organizations. As discussed earlier in the context of Canada, employment discrimination against women is rooted to some extent by the “gendering” of job roles across occupations. Such gendering represents in part social norms and customs, such as companies being less inclined to hire women for positions such as managers, engineers, or skilled craft workers. So it becomes a “taken for granted” (i.e., institutionalized) view that men are to be preferred to women for certain types of jobs. We might expect persistence and imitative behaviour across occupations, even with the addition of enforcement mechanisms to the EEA.

HYPOTHESIS 2: There will be variations across occupational categories in female employment equity in the period following the most recent amendments to the EEA.

Another source of external social influence and control may be the geographical location of the employment group. In previous work on employment equity for visible minorities, Jain and Lawler (2004) found systematic variations in EE across provinces. It was argued in that paper that such differences might be related to variations in the concentration of visible minorities among provinces. In the case of women, there may be variations in social conditions across provinces that impact on the likelihood of women entering particular careers. There may also be differential pressures across

provinces with respect to the extent to which women are expected to be in the labour market. Companies thus might follow the conventional or "taken for granted" employment practices with respect to women followed by other companies in similar employment groups across provinces.

HYPOTHESIS 3: There will be variations across provinces in female employment equity in the period following the most recent amendments to the EEA.

We would anticipate substantial differences in EE attainment in the industries. Again, institutional forces may be at work, with conventional employment practices shaped in part by comparisons to other firms in a company's industry. Here, we have reason to believe that EE goals will be achieved to a greater extent in the banking industry. Banks are generally highly visible organizations as there are a limited number of Chartered banks nationally. Moreover, these organizations are typically quite profitable, so are more apt to have the necessary resources to implement effective EE programs (the period of this study precedes the 2007-2008 economic crisis). In contrast, the transportation sector consists of generally less visible organizations and there are far larger numbers of companies in this sector. Thus, the chances of being a target for governmental action are more limited. This sector is also highly competitive and profit margins are more limited than in the banking sector. We have no strong prior expectations regarding differences between communications and transportation.

HYPOTHESIS 4: There will be variations across industrial groups in female employment equity in the period following the most recent amendments to the EEA. In particular, employment equity will be higher in the banking sector than in other industrial sectors covered by the EEA.

The total size of the employer within Canada and the size of the specific employment group (which is defined below) were included in our analysis as control variables. Prior research on the effectiveness of affirmative action in the U.S. (Leonard, 1984) has shown associations between organizational size and various indicators of affirmative action effectiveness. *Overall organizational size might be expected to impact EE positively in a couple of ways.* Large companies are more visible to both the public and government regulators. Also, larger organizations typically have more slack resources and thus may be better able to absorb the costs of making employment adjustments. *We also see the size of the employment group as positively impacting EE.* Larger units will attract more attention and changes in larger units will also have a larger effect on overall firm employment equity. Finally, we have included the type of employment, differentiating between full-time and part-time or temporary employment. Part-time and temporary jobs are generally viewed as in the secondary labour market (especially temporary jobs). Discrimination would be expected to shunt women into secondary jobs. *If so, we would expect to see higher levels of women, even significant over-representation of this group, in part-time or temporary jobs.*

Data and Research Methods

Our unit of analysis consisted of *provincial-wide occupational groups from each of the 594 companies covered by the EEA and filing reports between 1997 and 2004*. These data were supplied by Human Resource Development Canada (HRDC). For simplicity we will refer to a particular unit of observation as an *employment group* (e.g., an observation might consist of data on professionals employed by Air Canada in British Columbia in 1997). Our sample consists of 594 companies comprising 62,800 employment groups.

The dependent variable represents the degree to which female workers within a particular employment group have secured parity in relation to the relevant external labour market. *Internal employment equity* is defined as the ratio of female employment in a given employment group to total employment within the same employment group. *Female labour market representation* is based on census data for the province and is defined as the ratio of *female employment in the corresponding occupational category and province relative to total employment for that occupational category and province*.

The composite employment equity measure is defined as the *ratio of the internal equity measure and labour market representation*; this is termed *female employment equity* (Equation (1)). Values greater than or equal to 1.0 indicate that the firm achieved, at least in a technical sense, employment equity for female employees for that particular group. Values of less than 1.0 indicate the firm fell short of objectives defined by the Census for the employment group in question, and negative values indicate female employees were underrepresented in the firm for the occupation and province in question.

$$FE_EEc,p,i,t = (FEc,p,i,t/Nc,i,p,t) / (FEc,p,t/Nc,p,t) \quad (1)$$

where FE_EEc,p,i,t = measure of female employment equity in occupational category c in province p for company i at time t ;

FE = number of female employees in category defined by subscripts;

N = number of all employees in category defined by subscripts.

In this study, we only had Census data for two years (1996 and 2001). Thus values for $FE_{c,p,t}$ and $N_{c,p,t}$ had to be estimated for census off-years. We used the following formula to interpolate values for the period 1997-2000 for year t :

$$FE_{c,p,t} = FE_{c,p,96} + (t-1996) \times (FE_{c,p,01} - FE_{c,p,96})/5 \quad (2)$$

where $FE_{c,p,96}$ = 1996 Census report of employment occupational category c in province p ;

$FE_{c,p,01}$ = 2001 Census report of employment occupational category c in province p

We extrapolated the employment values for 2001 to 2004 as:

$$FE_{c,p,t} = FE_{c,p,01} + (t - 2001) \times (FE_{c,p,01} - FE_{c,p,96})/5 \quad (3)$$

The dependent variable (*female employment equity*) has been defined above. All of the explanatory variables were obtained from the HRDC database. The independent variables included:

- *Time trend term.* This is defined as the difference of the year of observation and 1997 (the first year in the dataset and the first year in which the 1995 amendments providing enforcement mechanisms went into effect). We also included a quadratic time trend term to test the possible nonlinearities discussed in conjunction with Hypothesis 1).
- *A set of dummy variables representing the major occupational categories contained in the dataset.* The occupational coding system used for EEA reports from 1997 onward was the NOC (National Occupational Codes), which is the same coding scheme used by the Census (thus allowing us to compare labour market representation and internal equity for each employment unit).
- *A set of dummy variables representing all provinces.*
- *Dummy variables indicating industrial sector.* The EEA applies to four industrial sectors: communications, banking, and transportation, and various miscellaneous industries.
- *Organizational size.* This is measured both by the total employment of the company in Canadian operations (*overall company size*) and the number of employees in the specific employment group. As both measures have quite skewed distributions, we use the logarithm transformations of these variables (*group size*).
- *Dummy variables indicating employment type.* We also investigated differences between full-time employees and those who are either employed on a temporary or part-time basis. Dummy variables differentiate among these three categories of employment.

Descriptive statistics for the variables in the analysis are presented in Table 1.

The regression analysis used sets of dummy variables to parameterize the categorical independent variables, including occupation, industrial sector, province, and employment type. A *deviational scoring* method was used in all cases. As an example, in the case of provincial categories, there were nine dummy variables corresponding to the ten provinces. The tenth province (in this case Prince Edward Island) serves as a reference group. The dummy variables were coded in the following manner. Each of the nine non-reference group provinces has a corresponding dummy variable. This was coded as a *one* if the observation occurred in that province and *zero* if it occurred in any of the other eight non-reference group provinces. If the observation occurred in the reference group province (i.e., Prince Edward Island), then all of the provincial dummy variables are coded as *negative one*. The deviational approach provides *comparisons of the average value of the dependent variable within each province to the overall average of the dependent variable, holding constant the other independent variables*. So the coefficient for the Ontario dummy variable represents the deviation of Ontario cases relative to the *overall average* after adjusting for occupation, industry, unit size, etc. The same approach was used to code the other categorical variables. Reference groups for occupation, industrial sector and

TABLE 1
Descriptive Statistics for Variables Used in Regression Analysis of the Women Employment Equity Measure, 1997-2004

Variable	Mean	SD
Female Employment Equity (log)	-2.70	4.06
Time Trend	3.68	3.68
Time Term Squared	18.67	16.95
Company Size (log)	8.05	1.81
Employment Group Size (log)	2.44	1.78
Part-time Employment	.23	.42
Temporary Employment	.02	.15
Transportation Sector	.46	.49
Communications Sector	.28	.45
Banking Sector	.10	.30
Senior Managers	.06	.24
Middle and Other Managers	.09	.29
Professionals	.09	.29
Semi Professionals and Technicians	.07	.26
Supervisors	.07	.21
Supervisors: Crafts and Trades	.05	.21
Administrative and Senior Clericals	.09	.29
Skilled Sales and Services Employees	.03	.16
Skilled Craft and Trades Workers	.07	.25
Clerical Personnel	.15	.35
Intermediate Sales and Service Personnel	.06	.25
Semi-Skilled Manual Workers	.08	.27
Other Sales and Service Personnel	.05	.21
Alberta	.14	.35
British Columbia	.13	.33
Manitoba	.09	.28
New Brunswick	.04	.19
Newfoundland	.02	.16
Nova Scotia	.04	.20
Ontario	.31	.46
Quebec	.18	.38
Saskatchewan	.05	.21

employment type were, respectively, “other manual workers,” “other covered sectors,” and “full-time employment.”

We used linear regression to test our model. However, the data in this study come from multiple levels—the company, the province, the occupation and the industry. Estimation of a multilevel model can involve fixed and random effect. As we have included dummy variables for provinces, occupations, and industries, those levels are handled through a fixed effects approach. However, we do not have detailed organization-specific data, so the organization level is handled using a random effects

approach. This is necessary as there are multiple observations within each of the 594 companies in the sample. A maximum likelihood, generalized least squares (GLS) estimation method was used.

Findings

Before considering and interpreting the results of the regression analysis, we will examine the change in a gross measure of occupational gender segregation between 1997 and 2004. Here we rely on the segregation index proposed by Duncan and Duncan (1995) that is extensively used in discrimination research. The coefficient can vary between 0 and 100 and, as used here, the higher the value, the greater the degree of occupational sex segregation. The index declined by 20% of its 1997 value in this time period. However, while the drop-off was sharp at first, it levelled off and became virtually flat by 2004, with little appreciable change after 2002. This would suggest possibly some initial impact of the EEA amendments, but one that declined over time. And there remained significant sex segregation at the end of this time period (Diagram 1).



We now turn our attention to more micro-level analysis: to what extent have employment opportunities for women changed in the period studied here? The dependent variable was highly skewed, so we took the natural logarithm of this female employment equity to normalize the variable. As we have a random effects model, we first used Generalized Least Squares (GLS) to estimate the null model (dependent variable only) to determine the extent of unobserved company-specific influences on the dependent variable. The error term in a bi-level model is the sum of a random error term (e) for the within groups effects and a random coefficient for the between group (i.e., company) effect (c). The variance of the latter term divided by the total error variance ($\text{var}(c)/\text{var}(c + e)$) is the intraclass correlation (ICC) and gives us an estimate of the extent to which unmeasured company-specific effects contribute

to variations in the log of female employment equity. The null model indicates that the ICC has a value of .17 (i.e., 17% of the variance is based on inter-company differences), which is statistically significant ($p < .001$).

We will return to this issue later and more fully discuss the significance of this finding.

Hypotheses

Time Trend. The Generalized least squares (GLS) estimates for the full model, with all explanatory variables included, are presented in Table 2. The overall model is highly statistically significant ($\chi^2(31) = 25542$; $p < .001$) and the model explains about 40% of the variance (i.e., R^2) in female employment equity. A principal focus in this paper is the time trend, which relates to Hypothesis 1. The linear term is statistically significant and positive ($p < .01$), which supports this hypothesis. Forgetting for a moment about the quadratic time term, the value of the coefficient (.06) can be interpreted as indicating that female employment equity increased around 6% per year of the period studied.¹ However, the quadratic term is statistically significant ($p < .10$). That it is negative in sign is really consistent with what we observed in the case of the occupational segregation analysis: the initial impact of the EEA changes began to level off over time. In order to see the net time effects, it is helpful to plot the total time effect, holding constant the effects of the other variables in the analysis, over the 1997-2004 period (Diagram 2). As can be seen, other things equal, female employment equity increased by about 5% per year in the late 1990s. However, that change dropped to only about 1% per year by 2003 and 2004. In fact, if we extrapolate out beyond 2004, the total effect would soon begin to decline, so this could in fact lead to an erosion in the position of women in sectors covered by the EEA.

As described above, we use three different sets of categorical variables to assess the impact of various institutional environments (occupations, provinces, and industries). The appropriate approach to assessing the overall impact of the different

Diagram 2

Female Employment Equity over Time (1997-2004)

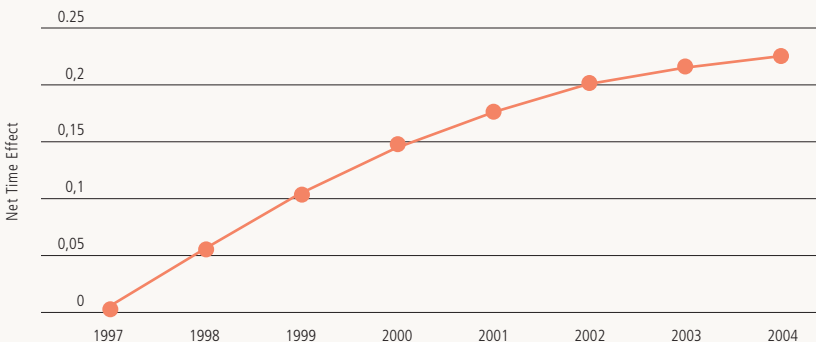


TABLE 2

Results of Generalized Least Squares (GLS) Analysis of the Log of Female Employment Equity Measure, 1997-2004 (n = 62,800)

Explanatory Factor	Coefficient	t-Value
Constant	-4.14	-17.18 ^a
Company Size (Log)	-.03	-1.05
Employment Group Size (Log)	.73	85.97 ^a
Time Trend	.06	3.10 ^b
Time Trend Squared	-.005	-1.72 ^c
Industrial Sector		
Communications Sector	.28	2.86 ^b
Transportation Sector	-.94	-8.92 ^a
Banking Sector	.15	1.02
<i>Other Covered Sectors [r]</i>		
Occupation		
Senior Managers	-.85	-17.21 ^a
Middle and Other Managers	1.03	26.03 ^a
Professionals	1.34	33.57 ^a
Semi-Professionals and Technicians	.06	1.30
Supervisors	2.38	54.49 ^a
Supervisors: Crafts and Trades	-2.27	-41.44 ^a
Administrators and Senior Clericals	2.95	72.54 ^a
Skilled Sales and Service Employees	.14	2.06 ^c
Skilled Craft and Trades Workers	-3.33	-71.34 ^a
Clerical Personnel	2.13	61.40 ^a
Intermediate Sales and Service	1.37	29.01 ^a
Semi-Skilled Manual Workers	-1.82	-40.70 ^a
Other Sales and Service Personnel	-.58	-10.36 ^a
<i>Other Manual Workers [r]</i>		
Province		
Ontario	.06	1.46
Quebec	-.22	-4.82 ^a
Nova Scotia	-.14	-2.04 ^c
New Brunswick	-.18	-2.50 ^c
Manitoba	.22	3.90 ^a
British Columbia	.07	1.47
Saskatchewan	-.11	-1.64 ^c
Alberta	.11	2.34 ^c
Newfoundland	-.23	-2.55 ^c
<i>Prince Edward Island [r]</i>		
Employment Type		
Temporary	-.14	-2.19 ^c
Part Time	.67	18.19 ^a
<i>Full Time [r]</i>		

^a Significant at the .001 level. ^b Significant at the .01 level. ^c Significant at the .10 level.

(r) indicates reference group; the coefficient for this category has been imputed, as discussed in the text. The standard error is not readily computable and is not reported.

sets of categorical variables is to perform a χ^2 test on the change in the log-likelihood function. That is, for each set of categorical variables, we first estimated a constrained model, where all of the parameters for a given set of categorical dummy variables were set to zero, while all other parameters were free to vary. A second equation was then estimated with all of those parameters free to vary; the difference in the log-likelihood of the two equations was used to assess the overall significance of that particular set of dummy variables.² The χ^2 values and significance levels for the sets of categorical variables are reported in Table 3.

Occupations. There are fourteen occupational categories used in both the Census and EEA reports in the period 1997-2004. Occupational sex segregation should be reflected in our analysis, though this may be dampened somewhat by the inclusion of the other independent variables. As described above, we used dummy variables with deviational coding to assess the impact of occupational categories on female employment equity (thus requiring thirteen dummy variables). The addition of this set of dummy variables was highly significant ($\chi^2(13) = 18812$, $p < .001$), thus supporting Hypothesis 2. It is obvious that, other things equal, employment inequities are pronounced in certain occupational categories. These are senior managers, supervisors in trades and crafts, skilled crafts and trades workers, semi-skilled manual workers, and other sales and service personnel. The negative values of the regression coefficients for these categories are statistically significant, indicating below average values for the employment equity measure in these groups (when controlling for the other variables in the analysis). For example, in the case of senior managers, female employment equity was less than half of the expected level and only 3% of the expected level in the case of skilled crafts and trades workers.³ There are other occupations where women have done substantially better, such as middle and other managers, where female employment equity is more than two and half times the expected level, and professional positions, where female employment equity was nearly four times the expected level. Given research in general on employment opportunities for women, these findings are much of what would have been expected. However, including other independent variables as controls in the analysis means that we can be more confident that these findings are not confounded by a number of other influences that may vary systematically across occupations. Most importantly, there are clearly substantial residual inequities after controlling for time trend (and the presumed impact of the EEA).

Provinces. We have included dummy variables, again using deviational coding, to assess geographical differences in employment equity. The overall effect of provincial indicators was statistically significant ($\chi^2(9) = 80$, $p < .001$), supporting Hypothesis 3. However, overall effect associated with geographical location was quite small in comparison to the changes associated with the occupational indicators (as evident in the comparison of the respective χ^2 terms). Thus geographical variations in female employment equity were not particularly meaningful. Some individual provincial indicators were statistically significant, indicating female employment equity was either above (Alberta, Manitoba) or below (Quebec, Nova Scotia, New Brunswick, Newfoundland, and Saskatchewan) expected levels when controlling for the other

variables in the analysis. However, these numbers were much smaller than in the case of occupational differences in female employment equity. Female employment equity was lowest in Quebec and Newfoundland, but the values in both provinces were not less than 80% of the expected values. In Alberta, it is about 12% higher than the expected level and about 24% higher in Manitoba.

Industry. The industrial group within which a particular company resides had a statistically significant impact on female employment ($\chi^2(3) = 126, p < .001$). This is consistent with Hypothesis 4, although the hypothesis as a whole is only partially supported. Consistent with expectations, female employment equity was significantly lower than average and thus significantly lower than in the case of banking (this is consistent with Hypothesis 4). Employment equity in banking was about at the average level, while employment equity is highest in communications (of these three industrial categories). Somewhat surprisingly, employment equity in communications was significantly higher than average and also greater than employment equity in banking (which we expected in fact to be highest), which is inconsistent with Hypothesis 4.

Control Variables

Employment Type. We differentiate among full-time, part-time, and temporary employment. Taken as a whole, employment type was statistically significant ($\chi^2(2) = 1280, p < .001$). Employment equity coefficients varied between temporary and part-time workers, with the latter having significantly higher than average female employment equity and the former having significantly lower than average female employment equity. This means that female employment equity for this category of employees was less than half of what it was for the other two categories. In the case of part-time employees, female employment equity was nearly twice the expected level (based on the antilog of the coefficient). It suggests that female employment equity was nearly four times higher for temporary than for full-time, regular employees. This finding suggests to perhaps a limited extent that any advances women have made in the EEA sector came at the expense of women moving into more marginal jobs. That is, EEA-sector companies may have been able to employ more women, but have done so by disproportionately hiring them into secondary jobs.

Organizational Size. Unexpectedly, total company size (employment) was negatively related to female employment equity. On the other hand, the impact of the size of the employment unit itself was positive and statistically significant, as anticipated. The implications of these findings are discussed below.

Company Effects. Apart from factors such as industry and organizational size, we do not have direct measures of organizational characteristics that might impact the pursuit and achievement of female employment equity goals (e.g., company profitability, business strategy, personal characteristics of key managers). Collecting these data for a large sample of organizations (i.e., 594 companies) would be difficult, especially if we were to attempt to do this retroactively for each company in the years 1997-2004. Except for a few large corporations, most companies covered by the EEA are smaller

firms that are privately held and for which there are little if any publicly available data. However, it is still possible to gain some sense of the extent to which these company factors had any sort of influence on EE outcomes. When we earlier discussed the null model, we noted that this estimating at least the variance of unobserved company influences, given that there are multiple observations on each of the companies. The bi-level, random-effects model (with company as the second-level entity and the employment group as first-level entity) allows us to at least estimate the level of magnitude of unobserved company effects. In the null model, our estimate indicated about 17% of the total variance in female employment equity could be attributed to cross-company differences. After controlling for the observed independent variables, the ICC had a value of about .09. This means about 9% of the residual variance is likely attributable to company effects. We estimated that about 40% of the variance in female employment equity was explained by our model. Thus only about 6% of the total variance was attributed to unobserved company effects $[\text{.09} \times (1-.4)]$. This means that although these company-specific properties were somewhat important, their impact would be relatively small in comparison to the variance already explained by the observed variables in the model used here. In other words, our model tells us a great deal about the determinants of female employment equity and the addition of more detailed information on company characteristics would potentially have only a relatively marginal effect on explanatory power.

Post-Hoc Analysis

We have established that there was some positive time effect for female employment equity, although it was relatively high initially and levels off in more recent years. An important issue that is not directly addressed in the preceding analysis concerns the fact that some women are also members of other designated groups (visible minorities, aboriginals, or disabled). A question then arises: How does the EEA impact women who are also members of designated groups versus those who are not? Of course, the largest group of this sort would be women who are also visible minorities. Do such women advance at the same rate, at a lower rate, or perhaps at a greater rate than women who are not also members of these other groups?

We analyzed this issue by generating as a dependent variable the percent of women within an employment group who are also members of other designated groups relative to the total number of women in the employment unit. The results of estimating our model with this dependent variable are presented in Table 3 (the sample size is smaller as there were several thousand employment units with no female employees and thus we could not compute a value for this dependent variable). Especially employment is the time trend here. A trend of zero would have indicated the mix of these two groups was relatively stable over time. However, the linear time was only marginally statistically significant ($p < .10$) and the effect size (.003) was also quite small. This indicated that the percent of minority and disabled women increased in the employment groups at a rate of only about .3% per year. This means that over the long haul (1997-2004), women in multiple groups increased relative to total women employed by about 2.4%. This result suggests that minority women (Visible

TABLE 3

Results of GLS Analysis of the Visible Minority, Aboriginal and Disabled Women as a Proportion of All Employed Women, 1997-2004 (n = 45,511)

Explanatory Factor	Coefficient	t-Value
Constant	.03	1.90 ^c
Company Size (Log)	.001	0.40
Employment Group Size (Log)	.005	7.58 ^a
Time Trend	.003	2.35 ^c
Time Trend Squared	.000	0.80
Industrial Sector		
Communications Sector	-.01	-1.35
Transportation Sector	-.02	-3.08 ^b
Banking Sector	.03	2.82 ^b
<i>Other Covered Sectors [r]</i>		
Occupation		
Senior Managers	-.07	-16.41 ^a
Middle and Other Managers	-.03	-12.84 ^a
Professionals	.01	4.19 ^a
Semi-Professionals and Technicians	-.01	-3.84 ^a
Supervisors	-.001	-0.61
Supervisors: Crafts and Trades	.01	2.42 ^c
Administrators and Senior Clericals	.002	1.13
Skilled Sales and Service Employees	-.01	-2.55 ^b
Skilled Craft and Trades Workers	.007	1.40
Clerical Personnel	.03	12.70 ^a
Intermediate Sales and Service	-.01	-3.35 ^a
Semi-Skilled Manual Workers	.02	5.68 ^a
Other Sales and Service Personnel	.04	9.49 ^a
<i>Other Manual Workers [r]</i>		
Province		
Ontario	.07	26.16 ^a
Quebec	-.03	-8.46 ^a
Nova Scotia	-.04	-8.07 ^a
New Brunswick	-.05	-10.53 ^a
Manitoba	.04	8.98 ^a
British Columbia	.09	28.76 ^a
Saskatchewan	.007	1.56
Alberta	.008	2.83 ^b
Newfoundland	-.04	-7.12 ^a
<i>Prince Edward Island [r]</i>		
Employment Type		
Temporary	-.007	-1.77 ^c
Part Time	-.003	-1.28
<i>Full Time [r]</i>		

^a Significant at the .001 level. ^b Significant at the .01 level. ^c Significant at the .10 level.

[r] indicates reference group; the coefficient for this category has been imputed, as discussed in the text. The standard error is not readily computable and is not reported.

minority, Aboriginal and Disabled women) are at least holding their own to women in either category and may be, to a limited extent, improving their representation in the EEA-covered companies. It is also worth noting that the quadratic term in this equation was not statistically significant, so that the rate of change per year was neither increasing nor decreasing.

Discussion

The Canadian Employment Equity Act is a major tool through which the federal government seeks to reduce the impact of prior discrimination in the workplace on members of designated groups. Women constitute the largest of these groups, so the effectiveness of the law could have major implications for the welfare of a significant proportion of the Canadian workforce.

Let us first consider our principal finding: variations in female employment equity in EEA-covered companies over time. As we argued above, the time trend is a proxy for various institutional influences relating to compliance with the EEA. In the ideal, we would expect that companies will respond to the requirements of the law fairly rapidly, so there would be a positive time trend. Firms would also begin to imitate other companies covered by the EEA in this respect, so the trend term would become steeper over time. If we had observed such an outcome, then we would have some basis for inferring that the EEA was effective in promoting EE for women. However, our results run in a different direction. At a fairly gross level, the occupational segregation index, which declined substantially in the first few years after the EEA amendments, began to level off by 2004. In the more micro-level analysis of female employment equity, we control for a variety of contextual influences. Although the trend term for female employment equity was upward sloping, the slope decreased over time as the quadratic term was negative in sign; by 2004, the positive effect the EEA appeared to have had in the first few years after enactment was levelling off. Although Hypothesis 1 is supported, it appears as though this finding is highly time dependent. In general, our study indicates that the effectiveness of the EEA had declined after 2002. Institutional theory would suggest that this is the consequence of a weak enforcement mechanism, with the penalties for not following the law being too weak and/or the likelihood of such sanctions even being imposed being small.

Of course, the trend term as a proxy for the effectiveness of the EEA has some limitations. There may have been other trending variables that impacted, perhaps adversely, on employment equity (e.g., changing economic conditions). This is one limitation of the study and future research would benefit from expanding the model we have proposed to include possible exogenous environmental factors that might now be confounding the interpretation of the time trend. If, under those circumstances, the trend term behaves in the way shown in this paper, then there would be even stronger evidence to suggest the effectiveness of the law has been in decline in more recent years. Of course, as further data on EEA companies become available, it will also be possible to test whether or not the declining effectiveness of the law over time shown here continues in the long term. On the positive side, our *post-hoc* analysis

demonstrated that women who were also members of minority groups were at least holding their own, and this was reflected in a slight, but significant, upward trend. This trend term was not found to be time-dependent.

Hypotheses 2-4 dealt with the impact of the institutional environment on female EE. The strongest effect was occupation (Hypothesis 2). Occupational categories can be seen as reflecting institutionalized beliefs about gender roles. Scott (1998), for example, refers to the cognitive-cultural aspects of the institutional environment. Such thinking, of course, promotes "glass ceilings." After controlling for time trend and the other factors in our model, occupational gender differences in EEA companies were quite evident. Of course, these are not societal-level inequalities, but inequalities within this sector relative to the broader labour market. Hence, the EEA-sector inequities in employment opportunities are even more pronounced than in the Canadian labour market more generally. There are some bright spots, however. Employment for both middle and other managers and for professionals is quite high. This means that female employment in these two occupations substantially exceeded female employment more generally (as reflected in census data).

The other two sources of information relating to institutional expectation included in our analysis were industry (Hypothesis 3) and geographic region (Hypothesis 4). Geographic influences were found to be statistically significant, though the effect size in comparison to cross-occupational differences was relatively weak. The inter-industry differences were somewhat stronger than geographic influences, but decidedly weaker than occupational effects. Although industry and geographical region were seen primarily as potential sources of institutional constraints, these variables can also be seen as proxies for cross-industry and geographic variations in other social forces and market conditions. As with time trend, future research might focus on developing measures that control for those factors so that we can rule out the possibility that the industrial and geographical influences are confounded. However, to the extent that they did represent economic and non-institutional social forces that might have been correlated with time, we have controlled for those exogenous influences.

One result involving the control variables that is especially interesting was that the overall size of the firm (i.e., total employment in Canada) was not statistically significant, but the size of the employment group was quite strong and positive in sign. The assumption that perhaps larger companies would be more visible and thus responsive to the EEA was not supported. However, it does appear that within companies, the size of the employment group had a strong effect. Of course, larger units are more visible *within the company*, so focusing on increasing EE in those units, but being less aggressive in small units, would be a strategy for limiting exposure to potential sanctions. One reason is that larger employment groups might have generally more turnover, so the opportunities to make changes by hiring more women would be greater. If firms were making higher EE adjustments in larger employment groups, this would serve public policy objectives, as the increase in the absolute number of women within a group would have to be higher in order to have a meaningful impact. Thus, more women would be pulled into jobs than would have been the case if companies focused EE efforts in small employment groups.

Implications for Policy Makers

We believe that these findings have important practical implications, especially with regard to EEA enforcement:

Increased Enforcement

It is clear from our analysis that women employees in the companies covered by the EEA continue to be under-represented, especially in large companies. In our view, Canadian Human Rights Commission needs to pay more attention to monitoring and enforcing employment equity in these firms, since it cannot be taken for granted that larger firms do well in EE, overall. Our results and analysis indicate that smaller firms had higher employment equity than larger firms. The larger units, therefore, may have a substantial adverse impact on achievement of parity with female representation in the Census.

As we noted before, employment equity has increased over time, but at a diminishing rate; in fact, EE attainment probably peaked in 2003-2004. In fact, there may now be a downturn in EE for women in the industries covered by the EEA. It may be necessary for the Canadian Human Rights Commission to examine the particular occupational groups within larger companies where employment equity is either low or non-existent relative to the Census. It is therefore clear that increased and vigorous enforcement of the EEA for the female group is necessary by the Canadian Human Rights Commission.

Occupational Inequities

The continuing underlying pattern of sex segregation has changed to only a limited extent. Occupational categories in which employment opportunities for women have traditionally been most limited continue to be problematic (that is, senior managers, skilled crafts and trades workers) and will require continued and perhaps intensified efforts to resolve.

Primary vs. Secondary Jobs

There are large discrepancies between employment equity in primary (i.e., full-time, permanent jobs) and secondary (i.e., temporary and part-time jobs), with employment equity much lower in the primary sector. This suggests that firms are more likely to take some sort of action to enhance employment opportunities in these secondary jobs. In addition, this may also result from the greater concentration of women in secondary jobs, either by choice or because opportunities are more limited for women in the primary sector. An important implication here is that overall strides made in enhancing employment equity for women are distorted, in that disproportionate improvement has occurred in the secondary employment sector.

Human Resources and Social Development Canada (HRSDC) need to have active labour market policies to correct this imbalance. HRSDC can involve employers actively since part-time and casual workers have work-personal life conflicts and have higher work absenteeism and turnover rates (Zeytinoglu *et al.*, 2004) than primary workers.

Notes

- 1 In our analysis, we use the natural logarithm of female employment equity. Therefore, the coefficients of the independent variables can be interpreted as percentage changes in female employment equity per unit change in the independent variable.
- 2 The actual statistic used is $-2 \times \Delta(\log\text{-likelihood function})$.
- 3 As the dependent variable is the natural logarithm of female employment equity, taking the exponent (base n) of coefficients results in the proportionate difference between the within group female employment equity and the average female employment equity (holding constant the effects of the other independent variables).

References

- Agocs, C. 2002. *Workplace Equality: International Perspectives on Legislation, Policy and Practice*. The Hague: Kluwer Law International, 35-46.
- Anker, R. 1998. *Gender and Jobs: Sex Segregation of Occupations in the World*. Geneva: ILO.
- Antecol, H. and P. Kuhn. 1999. "Employment Equity Programs and Job Search Outcomes of Unemployed Men and Women: Actual and Perceived Effects." *Canadian Public Policy*, 25, 527-545.
- Baker, M. and N.M. Fortin. 2000. "Does Comparable Worth Work in a Decentralized Labour Market?" Working paper 7937. Cambridge, Mass.: National Bureau of Economic Research.
- Blum, T.C., D.L. Fields and J.S. Goodman. 1994. "Organization-Level Determinants of Women in Management." *Academy of Management Journal*, 37, 241-268.
- Busby, N. 2006. "Affirmative Action in Women's Employment: Lessons from Canada." *Journal of Law and Society*, 33 (1), 42-58.
- Canadian Human Rights Commission. 2008. *Annual Report 2008*. Ottawa.
- Chaykowski, R.P. and L.M. Powell. 1999. "Women and Labour Market: Recent Trends and Policy Issues." *Canadian Public Policy*, 25, S1-S25.
- Cranford, C., L.F. Vosko and N. Zukewich. 2003. "The Gender of Precarious Employment in Canada." *Relations Industrielles/Industrial Relations*, 58 (3), 454-482.
- DiMaggio, P.J. and W.W. Powell. 1991. "The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields." *The New Institutionalism in Organizational Analysis*. W.W. Powell and P.J. DiMaggio, eds. Chicago: University of Chicago Press, 63-82.
- Duncan, O.D. and B. Duncan. 1995. "A Methodological Analysis of Segregation Indexes." *American Sociological Review*, 20, 210-217.
- Edwards, C., O. Robinson, R. Welchman and J. Woodall. 1999. "Lost Opportunities? Organizational Restructuring and Women Managers." *Human Resource Management Journal*, 9 (1), 55-65.
- England, K. 2003. "Disabilities, Gender and Employment: Social Exclusion, Employment Equity and Canadian Banking." *Canadian Geographer*, 47 (4), 429-450.
- England, K. and G. Gad. 2002. "Social Policy at Work? Equality and Equity in Women's Paid Employment in Canada." *Geo Journal*, 56 (4), 281-294.
- Evans, J.M. 2002. "Work/Family Reconciliation, Gender Wage Equity and Occupational Segregation: The Role of Firms and Public Policy." *Canadian Public Policy / Analyse de Politiques*, 28, Supplement: Occupational Gender Segregation: Public Policies and Economic Forces, S187-S216.
- Falkenberg, L.E. and L. Boland. 1997. "Eliminating the Barriers to Employment Equity in the Canadian Workplace." *Journal of Business Ethics*, 16 (9), 963-975.
- Fortin, N.M. and M. Huberman. 2002. "Occupational Gender Segregation and Women's Wages in Canada: A Historical Perspective." *Canadian Public Policy*, 28, 511-539.

- Holzberg, H. and D. Neumark. 1999. "Are Affirmative Action Hires Less Qualified? Evidence from Employer-Employee Data on New Hires." *Journal of Labor Economics*, 17(3), 534-569.
- HRSDC. 2007. *Employment Equity Act: Annual Report 2006*. Gatineau, Quebec: HRSDC.
- Jaffee, D. 2001. *Organization Theory: Tension and Change*. Boston: McGraw-Hill.
- Jain, H.C. 2006. "Human Rights: Issues in Employment." *Human Resources Management in Canada*. Toronto: Carswell, 50,002-50,059.
- Jain, H.C. and R. Hackett. 1992. "A Comparison of Employment Equity and Non-Employment Equity Organizations on Designated Group Representation and Views towards Staffing." *Canadian Public Administration*, 35, 103-108.
- Jain, H.C. and J.J. Lawler. 2004. "Visible Minorities under the Canadian Employment Equity Act, 1987-1999." *Relations Industrielles/Industrial Relations*, 59 (3), 585-611.
- Jain, H.C., P.J. Sloane and F.M. Horwitz. 2003. *Employment Equity and Affirmative Action: An International Comparison*. Armond, New York: M.E. Sharpe.
- Leck, J.D. 2002. "Making Employment Equity Programs Work for Women." *Canadian Public Policy / Analyse de Politiques*, 28, Supplement: Occupational Gender Segregation: Public Policies and Economic Forces, S85-S100.
- Leonard, J.S. 1984. "Employment and Occupational Advance under Affirmative Action." *The Review of Economic Statistics*, 66, 377-385.
- Lindsay, C. and M. Almey. 2006. "Immigrant Women." *Women in Canada. A Gender-Based Statistical Report*. Ottawa: Statistics Canada, 211-238.
- Mason, E.S. 1997. "A Case Study of Gender Differences in Job Satisfaction Subsequent to Implementation of an Employment Equity Programme." *British Journal of Management*, 8 (2), 163-173.
- Meyer, J.W. and B. Rowan. 1991. "Institutionalized Organizations: Formal Structure as Myth and Ceremony." *The New Institutionalism in Organizational Analysis*. W.W. Powell and P.J. DiMaggio, eds. Chicago: University of Chicago Press, 41-62.
- Oliver, C. 1991. "Strategic Responses to Institutional Processes." *Academy of Management Review*, 16, 145-179.
- Saks, A.M., J.D. Leck and D.M. Saunders. 1995. "Effects of Application Blanks and Employment Equity on Applicant Reactions and Job Pursuit Intentions." *Journal of Organizational Behavior*, 16 (5), 415-430.
- Scott, W.R. 1998. *Organizations: Rational, Natural, and Open Systems*. Upper Saddle River, N.J.: Prentice Hall.
- Statistics Canada. 2005. *Women in Canada: A Gender-Based Statistical Report*. Ottawa.
- Townson, M. 2003. *Women in Non-Standard Jobs: The Public Policy Challenge*. Ottawa: Status of Women Canada.
- Vosko, L. 2000. *Temporary Work: The Gendered Rise of a Precarious Employment Relationship*. Toronto: University of Toronto Press.
- Vosko, L. 2006. *Precarious Employment: Understanding Labour Market Insecurity in Canada*. Montreal and Kingston: McGill-Queens University Press.
- Webster, D., E. Applebaum and B.L. Dooley. 1997. *Managing Work and Family: Nonstandard Work Arrangements among Managers and Professionals*. Washington, D.C.: Economic Policy Institute.
- Zeytingolu, I., W. Lillevik, M.B. Seaton and J. Moruz. 2004. "Part-Time and Casual Work in Retail Trade." *Relations Industrielles/Industrial Relations*, 59 (3), 516-544.
- Zeytinoglu, I. and G. Cooke. 2006. "Who is Working on Weekends? Determinants of Weekend Work in Canada." *Decent Working Time: New Trends and Issues*. Y.Y. Boulin et al., eds. Geneva, Switzerland: ILO.

SUMMARY

Effectiveness of Canada's Employment Equity Legislation for Women (1997-2004): Implications for Policy Makers

This study focuses on the effectiveness of the federal Employment Equity Act (EEA). We assess the EEA with regard to female employees using quantitative data from employer reports published under the provisions of the EEA and the Canadian Census. Data in this study cover the period 1997 to 2004.

Women constitute the largest of the designated groups, so the effectiveness of the law could have major implications for the welfare of a significant proportion of the Canadian workforce. The most significant finding is that employment equity has increased over time, but at a diminishing rate. In fact, there may be something of a downturn in employment equity for women in the industries covered by the EEA.

It is clear from our analysis that women employees in the companies covered by the EEA continue to be under-represented, especially in large companies. Monitoring and enforcement of employment equity in these firms by the Canadian Human Rights Commission (CHRC) needs to be undertaken and is essential, since it cannot be taken for granted that larger firms do well in employment equity, overall. Our results and analysis indicate that smaller firms had higher employment equity than larger firms. It may also be necessary for the CHRC to examine the particular occupational groups within larger companies where employment equity is either low or non-existent relative to the Census.

The continuing underlying pattern of sex segregation has changed to only a limited extent. For instance, employment opportunities for women continue to be problematic (that is, senior managers, skilled crafts and trades workers) and will require continued and perhaps intensified efforts to resolve. There are large discrepancies between employment equity in primary (i.e., full-time, permanent jobs) and secondary (i.e., temporary and part-time jobs), with employment equity being much lower in the primary sector. Human Resources and Social Development Canada need to have active labour market policies to correct this imbalance.

KEYWORDS: employment equity, affirmative action, employment discrimination, human rights, women

RÉSUMÉ

L'efficacité de la loi canadienne en matière d'équité en emploi chez les femmes (1997-2004) : leçons pour les décideurs politiques

Cette étude questionne l'efficacité de la Loi canadienne en matière d'équité en emploi (LCEE) dans le cas des femmes en emploi. Elle fait appel à des données quantitatives provenant de deux sources : les rapports que doivent soumettre les employeurs en vertu des dispositions de la LCEE et le recensement du Canada mené par Statistique Canada, et couvre la période 1997 à 2004.

Comme les femmes constituent le plus important des quatre groupes désignés dans la LCEE, l'efficacité de la LCEE pourrait avoir des conséquences pour une proportion significative de la main-d'œuvre canadienne. Le résultat le plus significatif de l'étude est à l'effet que l'équité en emploi pour les femmes s'est effectivement améliorée durant la période sous étude mais à un rythme décroissant. En fait on pourrait même assister à un renversement de l'équité en matière d'emploi pour les femmes dans les industries couvertes par la LCEE.

Il ressort clairement de notre analyse que les femmes en emploi dans les entreprises couvertes par la LCEE continuent d'être sous-représentées, particulièrement dans les grandes entreprises. L'application et la mise en œuvre de l'équité en emploi doit être assumée par la Commission canadienne des droits de la personne (CCDP) puisqu'il ne peut être pris pour acquis que les plus grandes entreprises s'en tirent bien dans l'ensemble en matière d'équité en emploi. Nos résultats et analyses suggèrent en fait que les entreprises de moindre taille affichent une plus grande équité en emploi que celles de plus grande taille. La CCDP serait également avisée de se pencher sur les groupes professionnels au sein des grandes entreprises pour lesquels l'équité en emploi reste faible ou non existante selon les données du recensement.

Le comportement sous jacent à la discrimination sexuelle s'est modifié au fil des ans mais de manière limitée. Par exemple, les chances d'emplois pour les femmes continuent d'être problématiques (dans les cas des gestionnaires seniors, des ouvriers qualifiés et des employés de métier) et nécessiteront des efforts continus et intensifiés pour une amélioration satisfaisante. Il y a aussi de grandes disparités en matière d'équité en emploi entre les emplois primaires (permanents, à temps plein) et secondaires (temporaires, à temps partiel), celle-ci étant beaucoup plus faible dans le secteur secondaire. Ressources humaines et développement des compétences Canada (RHDCC) se doit d'avoir des politiques actives du marché du travail pour corriger ces déséquilibres.

MOTS CLÉS : équité en emploi; action positive; discrimination en emploi; droits de la personne, femmes

RESUMEN

Eficacia de la legislación canadiense sobre la equidad del empleo para las mujeres (1997–2004): Implicaciones para los decisores políticos

Este estudio focaliza la eficacia de la Ley de equidad en el empleo (LEE). Se evalúa la LEE respecto a las empleadas femeninas en base a los datos cuantitativos de los informes de los empleadores publicados según la LEE y del Censo Canadiense. Los datos de este estudio cubren el periodo 1997–2004.

Las mujeres constituyen la mayoría de los grupos designados, por tanto la eficacia de la ley puede tener implicaciones mayores para el bienestar de una proporción significativa de la fuerza de trabajo canadiense. El resultado más significativo es que la equidad en el empleo ha aumentado con el tiempo pero en una proporción cada vez menor. En efecto, puede existir un cierto descenso en la equidad del empleo para las mujeres en las industrias cubiertas por la LEE.

Nuestro análisis refleja con claridad que las empleadas mujeres en las compañías cubiertas por la LEE continúan siendo sub-representadas, especialmente en las grandes compañías. Se necesitaría que la Comisión de derechos humanos de Canadá se comprometa a promover el monitoreo y el refuerzo de la equidad en el empleo en estas firmas, puesto que no puede darse por sentado que en general las más grandes empresas actúen correctamente en cuanto a la equidad del empleo.

Nuestros resultados y análisis indican que las empresas más pequeñas tienen una equidad de empleo más elevada que las grandes empresas. Puede ser necesario que la Comisión de derechos humanos de Canadá examine los grupos ocupacionales particulares dentro de las más grandes compañías donde la equidad de empleo es baja o inexistente según el Censo.

El modelo continuamente subyacente de segregación sexual ha cambiado sólo de manera limitada. Por ejemplo, las oportunidades de empleo para las mujeres continúan siendo problemáticas (esto es, altos directivos, oficios calificados y trabajadores de comercio) y requerirán esfuerzos continuos y quizás intensos para resolverlos.

Hay amplias discrepancias entre la equidad de empleo entre los empleos primarios (tiempo completo, empleo permanente) y los empleos secundarios (temporario y a tiempo parcial); la equidad del empleo es mucho más baja en el sector primario. El Ministerio de Recursos Humanos y Desarrollo Social de Canadá necesita desarrollar políticas activas de mercado laboral para corregir este desequilibrio.

PALABRAS CLAVES: equidad de empleo, acción afirmativa, discriminación de empleo, derechos humanos, mujeres